Serial No. 10/538,152

Atty. Doc. No. 2002P18325WOUS

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REMARKS

Claims 13 - 32 are pending. The specification is objected to because of informalities. If claim 13 is found allowable, claim 32 will be objected to as a substantial duplicate. Claims 13, 17, 26, 29 and 32 are rejected under 35 USC 102(b) as being anticipated by Burgess (US 5,805,896). Claims 14, 18, and 27 are rejected under 35 USC 103(a) as being unpatentable over Burgess in view of Sakurai et al. (US 6,334,076). Claims 15 and 26 are rejected under 35 USC 103(a) as being unpatentable over Burgess in view of Elmqvist ("A Uniform Architecture for Distributed Automation", Advances in Instrumentation and Control, Instrument Society of America, Research Triangle Park, NC US, Vol. 46, Part 2, 1991, Pages 1599-1608). Claims 16, 19-25, 30, and 31 are rejected under 35 USC 103(a) as being unpatentable over Burgess in view of Sakurai and further in view of Elmqvist.

Claims 13, 17, 19, 26, and 29 are amended herein. Claims 14-16, 18, 20-22, 24-25, 27-28, 30, and 32 are canceled. Claims 33 and 34 are new. Claims 13, 17, 19, 23, 26, 29, 31, 33, and 34 are presented for examination. No new matter is added by this amendment.

Response to specification objections

Two subject paragraphs with the cited informalities are corrected herein as required.

Response to double patenting issue

Claim 32 has been canceled.

Response to 35 USC 102 rejections

All of the independent claims now recite a system (claims 13, 33) or a method (claim 26) for generating automation code for a manufacturing and/or processing plant. This overcomes the 35 USC 102 rejections per the Office Action page 5, paragraph 3: "Burgess...doesn't explicitly disclose that the code generation is for manufacturing and/or processing plants".

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Examiner interprets Burgess column 3, lines 58-66 as corresponding to Applicant's "metainformation". However, these lines of Burgess refer to messages such as a changed value of a scroll bar. This is not metainformation. Metainformation is information about information, such as its format, source, and destination. The prefix "meta" means "about", which is a level of abstraction above the root term. For this further reason, Burgess does not anticipate claims 13 and 26 and their dependents.

Response to 35 USC 103 rejections

The independent claims 13, 26, and 33 recite that the description comprises a drawing of components of the plant based on a flow of material in a plant. Elmqvist consistently teaches that the visualization model is hierarchical (page 1605, paragraph 2), not based on a physical flow of material. The cited paragraphs of Elmqvist (page 1601, paragraph 4; and page 1605 paragraph 10) describe information flow and data flow, but not material flow. Burgess and Sakurai cannot supply this missing element, because they do not disclose a drawing having control-relevant information used for code generation (Office Action page 7, paragraph 2).

Basing a model on a hierarchy of controllers, or decomposing (modularizing) software based on physical objects in the system is not the same as basing a code generation drawing on a flow of material in a plant. The flow of material provides a higher level of layout that is more easily understood by non-programmers, thus providing a high level of automatic code generation that is not available in any of the cited art, either individually or in combination.

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Conclusion

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The above amendments and arguments respond to the objections, and overcome the rejections of the office action with respect to all of the current independent claims.

Accordingly, allowance of this application is respectfully requested.

The commissioner is hereby authorized to charge any appropriate fees due in connection with this paper, including the fees specified in 37 C.F.R. §§ 1.16 (c), 1.17(a)(1) and 1.20(d), or credit any overpayments to Deposit Account No. 19-2179.

Respectfully submitted,

Dated: 5/2/17

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